

Application No. 09/982,485
Filed: October 18, 2001
TC Art Unit: 2686
Confirmation No.: 7010

REMARKS

The instant Remarks are filed in response to the official action dated October 5, 2004. Reconsideration is respectfully requested.

The status of the claims is as follows:

Claims 1-43 are currently pending.

Claims 1-43 stand rejected.

Claims 1-6, 10, 11, 16, 18-26, 29-31, 33, 36, 37 and 40-43 were rejected under 35 U.S.C. 102(e) over Kallio (U.S. Patent Application Publication US 2002/0147088 A1). The Applicants respectfully traverse this rejection.

Kallio describes an architecture for providing "seamless" mobility between GSM networks and different radio networks, using a dual-mode mobile station (MS) capable of accessing both WLAN and GSM radio technologies. The architecture comprises a WLAN 200 including a wireless mobility center (WMC) 210, which serves as an access point in the WLAN; and a GSM network 100, which includes a base station (BS) 110. A handover module implemented in either the MS or the WMC provides the mobility between the GSM network and the WLAN (see the Abstract of Kallio). In other words, this handover module enables the MS to roam between GSM network 100 and WLAN 200 (see page 3, paragraph

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0025, of Kallio, cited by the Examiner). Thus, as can be seen in the figures and embodiments described by Kallio, handover involves a transition by the MS from communicating with WMC 210 to communicating with BS 110, or vice versa.

Claim 1 recites a method for mobile communications over an interlinked network of WLAN access points. The access points have respective logical identities that define channels for use by mobile stations in communicating with the access points. The logical identities assigned to one or more of the access points may be altered by conveying a signal over the network. In other words, as explained in the instant application (see paragraph 0021 of the published application), while the physical access points are generally fixed in specific locations, the central network control unit is able to assign different logical identities to the various access points at different times. Consequently, the control unit is able to allocate communication channels flexibly in different parts of the network, so that the channels move to or with the mobile stations.

In rejecting claim 1, the Examiner associated the "logical identities" recited in the claim with "cell identities" in Kallio's architecture. Even if such an association were conceded to be proper, however, the cell identities of the

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access point (WMC) and base station in Kallio's system are fixed. Kallio neither teaches nor suggests that any change might be made during network operation in the "cell identity" of either the GSM base station (BS) or the WLAN access point (WMC). Both of these entities continue to communicate with the mobile station (MS) over their respective channels without change in their respective cell identities. During handover, it is the mobile station that roams from one network to the other.

Thus, Kallio does not anticipate or even suggest the step of "altering the logical identities assigned to one or more of the access points," as recited in claim 1. The conditions for rejections for anticipation set forth in MPEP 2131 are as follows:

TO ANTICIPATE A CLAIM, THE REFERENCE MUST TEACH EVERY ELEMENT OF THE CLAIM. "A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987)... "The identical invention must be shown in as complete detail as is contained in the... claim." *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

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Kallio fails to set forth each and every element of claim 1, either expressly or inherently, as required for a novelty rejection. Therefore, claim 1 is believed to be patentable over Kallio. In view of the patentability of claim 1, claims 2-6, 10, 11, 16, 18 and 19, which depend from claim 1, are believed to be patentable, as well.

Claim 20 recites apparatus for mobile communications, which operates on principles similar to the method of claim 1. Claim 20 was rejected on grounds similar to claim 1, with the added citation of paragraph 0029 in Kallio. This paragraph states that a network management system stores information including GSM cell identity. As noted above, there is no suggestion in this paragraph or elsewhere in Kallio that such cell identities might be altered in the course of network operation. Thus, claim 20 is believed to be patentable for the reasons explained above with reference to claim 1. In view of the patentability of claim 20, claims 21-26, 29-31, 33 and 36, which depend from claim 20, are believed to be patentable, as well.

Claim 37 recites apparatus for mobile communications that includes a plurality of WLAN access points linked together in a network. Each of the access points includes a baseband processing

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module having a respective logical identity programmably assigned thereto, and a radio module for converting baseband signals to radio frequency (RF) signals for transmission over the air to mobile stations. A control unit is coupled to convey signals over the network so as to reprogram the logical identity of the baseband processing module.

This claim was rejected on grounds similar to the rejection of claims 1 and 20. In response to this rejection, the Applicants again point out that Kallio neither teaches nor suggests altering (or reprogramming) the logical identities of access points in a wireless network. Therefore, claim 37 is believed to be patentable, as is claim 38, which depends from claim 37.

Claims 7-9, 12-14, 16, 17, 32, 34, 35, 38 and 39 were rejected under 35 U.S.C. 103(a) over Kallio in view of Mahany (U.S. Patent Application Publication US 2004/0077353 A1). Applicants respectfully traverse this rejection.

Claims 7-9, 12-14, 16, 17, 32, 34, 35 and 38 are believed to be patentable in view of the patentability of independent claims 1, 20 and 37, as explained above.

Independent claim 39 recites apparatus for mobile communications that includes a plurality of WLAN access points linked together in a network. A control unit includes a plurality

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of baseband processing modules for generating modulated baseband signals, the baseband processing modules having respective logical identities. The control unit also includes switching circuitry, for coupling the baseband processing modules to the access points so that the access points transmit the RF signals on respective channels assigned by the switching circuitry.

In rejecting this claim, the Examiner indicated that Kallio's management system 300 (identified with the control unit recited in claim 39) comprises a plurality of baseband processing modules. The Applicants were unable to find any mention at all in Kallio of baseband processing modules, let alone in the "management system" as the Examiner asserts. The Examiner associated the "switching circuitry" recited in claim 39 with Kallio's MSC 120, but there is no suggestion in Kallio that the MSC might couple baseband processing modules (in the management system or elsewhere) to access points.

Mahany describes a spread spectrum transceiver module utilizing multiple mode transmission. The passages in Mahany cited by the Examiner (see paragraphs 122, 123, and 151 of Mahany) describe a radio transceiver used in wireless access devices, which includes a baseband formatter and spreader 124. The Applicants will concede that transceivers and baseband circuits,

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such as those described by Mahany, were known in the art prior to the present invention. Mahany, however, neither teaches nor suggests the novel arrangement of baseband processing modules and switching circuitry recited in claim 39.

Thus, claim 39 is believed to be patentable over the cited art. In view of the patentability of claim 39, claims 40-43, which depend from claim 39, are also believed to be patentable.

The dependent claims in this application are also believed to recite independently-patentable subject matter. In view of the patentability of the independent claims, however, Applicants will refrain from arguing the specific patentability of the dependent claims in the interest of brevity.

The Applicants have studied the additional references made of record by the Examiner and believe all the claims in the present patent application to be patentable over these references, whether taken individually or in any combination.

The Applicants believe the remarks presented hereinabove to be fully responsive to all of the grounds of rejection raised by the Examiner. In view of these remarks, the Applicants respectfully submit that all of the claims in the present application are in order for allowance. Notice to this effect is hereby requested.

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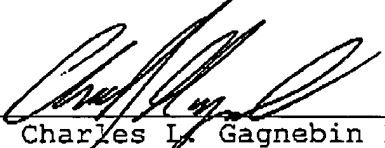
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The Examiner is encouraged to telephone the undersigned Attorney to discuss any matter that would expedite allowance of the present application.

Respectfully submitted,

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